

AMENDMENTS TO THE CLAIMS (Marked-up copy)WHAT IS CLAIMED IS:

1. (Currently amended) A method of computerized generation of a derivative value enhanced document from a patent document, comprising the steps of:

(a) selecting a claim section of the patent document;

(b) processing the claim section, including:

(i) transforming multiple dependent claims into single dependent claims;

(ii) sorting the transformed claims by claim numbers to which the claims refer to;

(iii) interchanging positions of any two neighboring sorted claims, the preceding claim and the succeeding claim, if they meet the following requirements:

both claims are dependent claims and refer to different claims; and

succeeding claim does not refer to the preceding claim;

(c) extracting claim dependency and text of claims from the interchanged claim section;

(d) converting the extracted claim dependency into a graphical form, comprising a set of graphical elements, each element corresponding to an individual claim or a group of claims;

(e) converting the extracted text of claims into a textual form, comprising a set of elements, each element being a text of an individual claim or a text of a group of claims;

(f) forming a derivative claim section by combining the converted graphical and textual elements of the converted claim dependency and text of claims in the order obtained after the step (iii) of interchanging, and associating thereof with a computer program providing a user interactive selection of a subset of elements in one of the graphical and textual forms, and displaying said subset in the selected form along with the related subset of elements according to the transformed claim dependency in the other form to a user, the elements in the graphical form being displayed in the order obtained after the step (iii) of interchanging, and

(g) forming the derivative document by combining the derivative claim section with the patent document or a part of the patent document.

2. (Previously presented) A method as described in claim 1, wherein the steps of converting further comprise establishing links between the elements of the graphical and textual subsets according to the transformed claim dependency.

3. (Canceled)

4. (Canceled)

5. (Previously presented) A method as described in claim 1, further comprising one or more of the following:

displaying the selected subsets of elements on a computer screen; and

displaying the selected subsets of elements on a computer screen in combination with other elements of the sets.

6. (Canceled)

7. (Currently amended) A method as described in claim 1, wherein the step (e) comprises converting into the form selected from the list consisting of ASCII, HTML, SGML, XHTML, and XML formats.

8. (Previously presented) A method as described in claim 1, wherein the step (g) comprises a step selected from the list consisting of:

forming the document so that the derivative claim section is replacing the claim section of the patent document;

forming the document so that the derivative claim section is supplementing the patent document;

forming the document so that the derivative claim section is supplemented by a part of the patent document; and

forming the document so that the derivative document is the derivative claim section of the patent document.

9. (Original) A method as described in claim 1, further comprising a step of performing one or more of the following:

storing data obtained in at least one of the steps in a database;

sending data obtained in at least one of the steps over a network;

compressing data obtained in at least one of the steps;
displaying one of the derivative document and the derivative segment on a computer screen.

10. (Previously presented) A method as described in claim 1, wherein the step (b) comprises distributed processing of the patent document in a network environment performed by using processing power of more than one computer.

11. (Original) A method as described in claim 10, wherein the step of distributed processing comprises the steps of initial processing of the document performed on a server side and final processing performed on a client side.

12. (Currently amended) A derivative patent document, generated according to the method as described in claim 1 comprising:

(i) a transformed claim section, in which multiple dependent claims are transformed into single dependent claims, said transformed claims are sorted by claim numbers to which the claims refer to, and the positions of any two neighboring sorted claims, the preceding claim and the succeeding claim, are interchanged if they meet the following requirements:

both claims are dependent claims and refer to different claims; and

succeeding claim does not refer to the preceding claim;

and

(ii) an executable computer program code for interactive displaying the transformed, sorted and interchanged claims of the claim section or any part thereof, or a reference to a file where the computer program code resides, the computer program code being executable in response to an event.

13. (Currently amended) A method of computerized generation of a database stored in a memory, comprising the steps of:

(a) providing a patent document;

(b) performing the steps of the method as described in claim 1; and

(c) storing data obtained in at least one of the steps of the step (b) in a database stored in the memory;

~~(d) repeating the steps (a) to (c) required number of times.~~

14. (Previously presented) A database stored in a memory and obtained according to the method as described in claim 13.

15. (Currently amended) A method of computerized generation of a derivative claim section from a patent document, comprising the steps of:

(a) selecting a claim section of the patent document;

(b) processing the claim section, including:

(i) transforming multiple dependent claims into single dependent claims;

(ii) sorting the transformed claims by claim numbers to which the claims refer to;

(iii) interchanging positions of any two neighboring sorted claims, the preceding claim and the succeeding claim, if they meet the following requirements:

both claims are dependent claims and refer to different claims; and

succeeding claim does not refer to the preceding claim;

(c) extracting claim dependency and text of claims from the interchanged claim section;

(d) converting the extracted claim dependency into a graphical form, comprising a set of graphical elements, each element corresponding to an individual claim or a group of claims;

(e) converting the extracted text of claims into a textual form, comprising a set of elements, each element being a text of an individual claim or a text of a group of claims; and

(f) forming a derivative claim section by combining the converted graphical and textual elements of the converted claim dependency and text of claims in the order obtained after the step (iii) of interchanging, and associating thereof with a computer program code providing a user interactive selection of a subset of elements in one of the graphical and textual forms, and displaying said subset in the selected form along with the related subset of elements according to the transformed claim dependency in the other form to a user, the elements in the graphical form being displayed in the order obtained after the step (iii) of interchanging.

16. (Previously presented) A method as described in claim 15, wherein the steps of converting further comprise establishing links between the elements of the graphical and textual subsets according to the transformed claim dependency.

17. (Canceled)

18. (Canceled)

19. (Previously presented) A method as described in claim 16, further comprising one or more of the following:

displaying the selected subsets of elements on a computer screen; and

displaying the selected subsets of elements on a computer screen in combination with other elements.

20. (Canceled)

21. (Previously presented) A method as described in claim 15, wherein the step (e) comprises converting into the form selected from the list consisting of ASCII, HTML, SGML, XHTML and XML formats.

22. (Previously presented) A method as described in claim 15, wherein the step (b) comprises distributed processing of the claim section in a network environment performed by using processing power of two or more computers.

23. (Previously presented) A method as described in claim 22, wherein the step of distributed processing comprises the steps of initial processing of the claim section performed on a server side and final processing of the claim section performed on a client side.

24. (Currently amended) A derivative claim section of a patent document, comprising:
~~generated according to the method as described in claim 15;~~ (i) a transformed claim section, in which multiple dependent claims are transformed into single dependent claims, said transformed claims are sorted by claim numbers to which the claims refer to, and the positions of any two neighboring sorted claims, the preceding claim and the succeeding claim, are interchanged if they meet the following requirements:

both claims are dependent claims and refer to different claims; and

succeeding claim does not refer to the preceding claim;

and

(ii) an executable computer program code for interactive displaying the transformed, sorted and interchanged claims of the claim section or any part thereof, or a reference to a file

where the computer program code resides, the computer program code being executable in response to an event.

25. (Currently amended) A computerized system for generating a derivative document from a patent document, comprising a computer having a memory, said memory comprising:

(a) means for selecting a claim section of the patent document;

(b) means for processing the claim section, ~~into respective sets of elements in graphical and textual forms~~ including:

(i) means for transforming multiple dependent claims into single dependent claims;

(ii) means for sorting the transformed claims by claim numbers to which the claims refer to;

(iii) means for interchanging positions of any two neighboring sorted claims, the preceding claim and the succeeding claim, if they meet the following requirements:

both claims are dependent claims and refer to different claims; and
succeeding claim does not refer to the preceding, and claim; and

(c) means for adding a new section to the patent document or to a part thereof to form the derivative document, the new section comprising a ~~text of a computer program code for~~ interactive displaying the transformed sorted and interchanged processed claim section or any part thereof ~~in at least one of said forms~~, or a reference to a file where the ~~text of said computer program code~~ resides, the computer program code being executable in response to an event.

26. (Original) A computerized system as described in claim 25, further comprising means for sending the derivative document over a network.

27. (Previously presented) A computerized system as described in claim 25, wherein the means (b) comprises means for distributed processing of the document in a network, wherein processing power of two or more computers is used.

28. (Canceled)

29. (Canceled)

30. (Canceled)

31. (Canceled)

32. (Canceled)

33. (Canceled)

34. (Canceled)

35. (Canceled)

36. (Canceled)

37. (Currently amended) A method as described in claim 1, wherein the step of selection of the subset of elements comprises the step selected from the list consisting of:

selecting the subset comprising only one element in one form, and displaying the selected subset in said one form with the related subset comprising the corresponding element of the other form;

selecting the subset comprising only one element in one form, and displaying the selected subset in said one form along with the related subset in the other form comprising first and second elements, wherein the first element corresponds to the selected element of the first form, and the second element is the element on which the first element refers to according to claim dependency;

selecting the subset comprising elements of one form corresponding to independent claims only, and displaying the selected subset in said one form along with the related subset in the other form comprising elements of the other form corresponding to the selected elements of said one form;

selecting the subset comprising elements in one form corresponding to an independent claim and all the dependent claims referred thereto only, and displaying the selected subset in said one form along with the related subset comprising elements in the other form corresponding to the selected elements in said one form; and

selecting the first subset comprising an independent claim only in one form, and displaying the selected subset in said one form along with the related subset comprising elements in the other form corresponding to the selected independent claim and all dependent claims referred thereto.

38. (Previously presented) A method as described in claim 37, further comprising one or more of the following:

displaying the selected subsets of elements on a computer screen; and

displaying the selected subsets of elements on a computer screen in combination with other elements of the sets.

39. (Previously presented) A computer program product for generating a derivative document from a patent document, comprising a computer usable medium having computer readable program code means embodied in said medium for causing said computer to perform the steps of the method as described in claim 1.

40. (Previously presented) A computer program product for generating a derivative claim section of a patent document, comprising a computer usable medium having computer readable program code means embodied in said medium for causing said computer to perform the steps of the method as described in claim 15.

41. (Canceled) ~~A method as described in claim 1, wherein the step (b) further comprises:~~

~~(i) transforming multiple dependent claims into single dependent claims;~~

~~(ii) sorting the transformed claims by claim numbers to which the claims refer to;~~

~~(iii) interchanging positions of any two neighboring sorted claims, the preceding claim and the succeeding claim, if they meet the following requirements:~~

~~both claims are dependent claims and refer to different claims; and~~

~~succeeding claim does not refer to the preceding claim;~~

~~wherein the steps (i) to (iii) are performed before the step (e) of extracting.~~

42. (Canceled) ~~A method as described in claim 1, wherein:~~

~~the step (c) comprises extracting claim dependency and text of claims from the interchanged claims;~~

~~the step (f) comprises combining and displaying the converted graphical and textual elements in the order obtained after the step (iii) of interchanging and according to the transformed claim dependency.~~

43. (Currently amended) A method as described in claim 41, wherein the step (i) further comprises one of the following:

adding single dependent claims generated from multiple dependent claims to the end of original set of claims; ~~and/or~~

inserting claims generated from a multiple dependent claim into original set of claims immediately after the multiple dependent claim, followed by re-numbering of claims starting from the multiple dependent claim and to the end of claim section.

44. (Canceled) ~~A derivative patent document, comprising:~~

~~(i) a converted claim section, in which claim dependency and text of claims have been extracted and converted into elements in graphical and textual forms respectively and according to claim dependency; and~~

~~—— (ii) a text of a computer program for interactive displaying the converted claims of the claim section or any part thereof to a user in at least one of said forms, or a reference to a file where the text of said program resides, the computer program being executable in response to an event.~~

45. (Canceled) ~~A derivative patent document as described in claim 44, wherein said transformed claims are sorted by claim numbers to which the claims refer to, and the positions of any two neighboring sorted claims, the preceding claim and the succeeding claim, are interchanged if they meet the following requirements:~~

~~both claims are dependent claims and refer to different claims; and~~

~~succeeding claim does not refer to the preceding claim;~~

~~and~~

~~—— wherein the interactive displaying is performed for the transformed, sorted and interchanged claims.~~

46. (Currently amended) A computer database stored in a memory, the database storing derivative patent documents of claim 44~~12~~.

47. (Currently amended) A derivative patent document as described in claim 44~~12~~, the derivative patent document being presented in a web compatible form such that to be recognized by a browser.

48. (Canceled) ~~A method as described in claim 15, wherein the step (b) further comprises:~~

- ~~(i) transforming multiple dependent claims into single dependent claims;~~
- ~~(ii) sorting the transformed claims by claim numbers to which the claims refer to;~~
- ~~(iii) interchanging positions of any two neighboring sorted claims, the preceding claim and the succeeding claim, if they meet the following requirements:~~

~~both claims are dependent claims and refer to different claims; and
succeeding claim does not refer to the preceding claim;~~

~~wherein the steps (i) to (iii) are performed before the step (e) of extracting.~~

49. (Canceled) A method as described in claim 48, wherein:

~~the step (e) comprises extracting claim dependency and text of claims from the interchanged claims;~~

~~the step (f) comprises combining and displaying the converted graphical and textual elements in the order obtained after the step (iii) of interchanging and according to the transformed claim dependency.~~

50. (Canceled) A system as described in claim 25, wherein the means (b) comprises:

- ~~(i) means for transforming multiple dependent claims into single dependent claims;~~
- ~~(ii) means for sorting the transformed claims by claim numbers to which the claims refer to;~~
- ~~(iii) means for interchanging positions of any two neighboring sorted claims, the preceding claim and the succeeding claim, if they meet the following requirements:~~

~~both claims are dependent claims and refer to different claims; and
succeeding claim does not refer to the preceding claim.~~

51. (Currently amended) A computerized system for generating a derivative claim section document ~~from of~~ a patent document, the system comprising a computer having a memory, said memory comprising:

~~(a) means for selecting a claim section of the patent document;~~

~~(b) means for processing the claim section, including:~~

(i) means for transforming multiple dependent claims into single dependent claims;

(ii) means for sorting the transformed claims by claim numbers to which the claims refer to;

(iii) means for interchanging positions of any two neighboring sorted claims, the preceding claim and the succeeding claim, if they meet the following requirements:

both claims are dependent claims and refer to different claims; and
succeeding claim does not refer to the preceding claim; and

(eb) means for extracting claim dependency and text of claims from the interchanged claims;

(ec) means for converting the extracted claim dependency into a graphical form, comprising a set of graphical elements, each element corresponding to an individual claim or a group of claims;

(ed) means for converting the extracted text of claims into a textual form, comprising a set of elements, each element being a text of an individual claim or a text of a group of claims; and

(fe) means for forming a derivative claim section by combining the converted graphical and textual elements of the converted claim dependency and text of claims in the order obtained after the step (iii) of interchanging, and associating thereof with a computer program code providing a user interactive selection of a subset of elements in one of the graphical and textual forms, and displaying said subset in the selected form along with the related subset of elements according to the transformed claim dependency in the other form to a user, the elements in the graphical form being displayed in the order obtained after the step (iii) of interchanging; and

(g) means for forming the derivative document by combining the derivative claim section with the patent document or a part of the patent document.

52. (New) A method as described in claim 1, wherein the step (f) further comprises associating the derivative claim section with a computer program code providing a user interactive selection of a subset of elements in one of the graphical and textual forms, and displaying said subset in the selected form along with the related subset of elements according to

the transformed claim dependency in the other form to a user, the elements in the graphical form being displayed in the order obtained after the step (iii) of interchanging.

53. (New) A method as described in claim 1, wherein the step (c) of extracting claim dependency comprises forming a respective triplet for each interchanged claim, the triplet comprising first, second and third elements which are respectively as follows:

a claim number;

a vertical offset, characterizing a vertical position of the claim, which is defined by the relative position of the claim compared to the first claim in the interchanged set of claims;

a horizontal offset, characterizing a horizontal position of the claim, which is defined by the level of claim dependency for the claim.

54. (New) A method as described in claim 53, wherein the step (d) of converting comprises converting said triplets into respective graphical elements which are arranged into a substantially linear tree, wherein vertical and horizontal positions of the graphical elements in the tree are defined by the vertical and horizontal offsets in the respective triplets.

55. (New) A method as described in claim 54, wherein the step (c) further comprises forming a corresponding quadruplet for each interchanged claim, the quadruplet comprising the respective triplet and a fourth element, which is a text of the claim.

56. (New) A method as described in claim 55, wherein the step (f) comprises a simultaneous displaying a subset of graphical elements from said substantially linear tree along with the related subset of fourth elements from the quadruplets.